REMARKS

Claims 1-9 are pending in the present application. Claims 1-3 and 7-9 stand rejected and claims 4-6 stand under objection. Claims 1, 3-6 and 8 have been amended. Claims 2 and 10-20 have been cancelled without prejudice. Applicants greatly appreciate the Examiner's indication that claims 4-6 would be allowable if rewritten in independent form to include the limitations of respective base claims. The Examiner's reconsideration of the rejected claims is respectfully requested in view of the following remarks and preceding amendments.

Election/Restriction

Claims 10-20 were withdrawn from consideration by the Examiner pursuant to Applicant's prior election. Accordingly, claims 10-20 have been cancelled without prejudice.

Claim Rejections – 35 USC § 103(a)

Claims 1-3 and 7-9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Hanami (U.S.Pat. No. 6,765,965) in view of Ohtani (U.S.Pat. No. 6,671,321), as set forth by the Examiner in paragraphs 2-6 of the Office Action.

It should be noted at the outset that claim 1 has been amended to incorporate subject matter from cancelled claim 2. Accordingly claims 3-6 were amended to properly depend from claim 1. Minor amendments were also made to claims 1, 6 and 8 to clarify the respectively claimed inventions.

It is submitted that the combination of Hanami and Ohtani does not disclose or suggest *a macroblock measure circuit for receiving the current frame video data read from the macroblock data memory to calculate a sum of absolute differences between a mean intensity of a macroblock and an intensity of each pixel of the macroblock*, as recited in claim 1.

5

The Examiner contends (in p.5 of the Office Action) that the motion detection units MD#A and MD#B of Hanami disclose the claimed macroblock measure circuit. However, the analysis provided by the Examiner is not germane and, accordingly, insufficient to establish a *prima facie* case of obviousness against claim 1. For example, the Examiner suggests that *a macroblock measure circuit for receiving the current frame video data read from the macroblock data memory to calculate a sum of absolute differences between a mean intensity of a macroblock and an intensity of each pixel of the macroblock* is disclosed by Hanami, because figure 27 discloses a search area SAA of MD#A for performing and outputting a search region decision data for MD#A. Even if Hanami teaches, as the Examiner suggests, a search area SAA for performing and outputting a search region decision data, is not relevant to a *macroblock measure circuit ... to calculate a sum of absolute differences between a mean intensity of a macroblock and an intensity of each pixel of the macroblock.* In any event, figure 27 merely shows that a search area sampled for motion detection can be larger when an inter-frame distance is longer (See col.18, lines 45-58 of Hanami), which is very different from performing calculations on intensities of pixels of a macroblock.

Further, the deficiencies of Hanami with respect to the claim limitation of a *macroblock measure circuit for receiving the current frame video data read from the macroblock data memory to calculate a sum of absolute differences between a mean intensity of a macroblock and an intensity of each pixel of the macroblock* are not cured by Ohtani. For example, Ohtani is merely concerned with detecting motion in a large search area by subdividing the search area into smaller regions(See col. 2, lines 44-56), which does not relate to calculating *a sum of absolute differences between a mean intensity of a macroblock and an intensity of each pixel of the macroblock.*

It is further submitted that the combination of Hanami and Ohtani does not disclose or suggest *a search region deciding circuit for outputting a search region decision signal based on the sum of absolute differences between the mean intensity of the macroblock and the intensity of the each pixel of the macroblock*, as essentially claimed in claim 1.

The Examiner contends that a *search region deciding circuit for outputting a search region decision signal based on the sum of absolute differences between the mean intensity of the macroblock and the intensity of the each pixel of the macroblock* is disclosed by figure 27, figure 28 and figure 24 of Hanami. However, yet again, the analysis provided by the Examiner is not germane and, accordingly, insufficient to establish a *prima facie* case of obviousness against claim 1. For example, the Examiner states that figure 27 discloses a search area SAA of MD#A for performing and outputting a search region decision data for MD#A, figure 28 discloses a search area SAB of MD#B for performing and outputting a search region decision data for MD#B, and element FMD# of figure 24 discloses determining the output of the search region decision data. Even if Hamami teaches, as the Examiner suggests, search areas SAA,SAB outputting search region decision data and a FMD# determining the output of the search region decision data are not relevant to *a search region decision signal based on the sum of absolute differences between the mean intensity of the macroblock and the intensity of the each pixel of the macroblock*. For example, **1)** figure 27 merely shows that a search area sampled for motion detection can be larger (e.g., SAA) when an inter-frame distance is longer and smaller (e.g., SAB) otherwise, **2)** figure 28 merely shows that the larger area (e.g., SAA) enables a coarse search for motion and a smaller area (e.g., SAB) enables a full or more detailed search for motion (See col. 18, 58-62), and **3)** figure 24 merely shows that the FMD# generates motion vector information from the outputs of the MD#A and MD#B (See col. 17, lines 60-67). The

three above citations (i.e., to fig. 27,28, and 24) clearly neither mention, nor relate to a *search region decision signal based on the sum of absolute differences between the mean intensity of the macroblock and the intensity of the each pixel of the macroblock.*

Further, the deficiencies of <u>Hanami</u> with respect to the claim limitation of a *search region deciding circuit for outputting a search region decision signal based on the sum of absolute differences between the mean intensity of the macroblock and the intensity of the each pixel of the macroblock* are not cured by <u>Ohtani</u>. For example, <u>Ohtani</u> is merely concerned with detecting motion in a large search area by subdividing the search area into smaller regions(See col. 2, lines 44-56), which does <u>not</u> relate to *outputting a search region decision signal based on the sum of absolute differences between the mean intensity of the macroblock and the intensity of the each pixel of the macroblock.*

Accordingly, <u>Hanami</u> and <u>Ohtani</u> alone or in combination, <u>do not</u> render claim 1 obvious. Therefore, claims 1 is patentable over the combination of <u>Hanami</u> and <u>Ohtani</u>. Moreover, claims 3-9 are believed to be patentable over the combination of <u>Hanami</u> and <u>Ohtani</u> at least by virtue of their dependence from claim 1. Withdrawal of the claim rejections under 35 U.S.C. § 103 is respectfully requested.

In view of the foregoing remarks, it is respectfully submitted that all the claims now pending in the application are in condition for allowance. Early and favorable reconsideration is respectfully requested.

Respectfully submitted,

Robert J. Newman
Reg. No. 60,718
Attorney for Applicant(s)

F. Chau & Associates, LLC
130 Woodbury Road
Woodbury, New York 11797
TEL.: (516) 692-8888
FAX: (516) 692-8889